Ice Detectors and Performance Monitors

FAA In-flight Icing / Ground De-icing International Conference & Exhibition

In-flight Ice Detectors and Performance Monitors Development, Requirements, Standards and Approval

- Presentations regarding issues related to primary certification of accretion type ice detectors.
- Downlinking of realtime ice detector data.
- New methods of aerodynamic performance monitoring.
- Ice detector product updates.
- Pilots' perspectives on in-flight ice detection.

In-flight Ice Detectors – Panel Discussion

- Kathy Ishimaru presentation
  - Draft AC 20-73 app K
- Major topic of discussion, status of primary certification of accretion based ice detectors.
  - Possible ice accretion on critical surfaces without detection.
  - Difficult to quantify using current tools.
  - Means of compliance still to be determined.

Ground Ice Detector Development & Requirements

- 2 GIDS manufacturers gave development updates.
- 2 FBO's provided expectations and results of recent GIDS evaluations.

Ground Ice Detector Standards & Approval

- Background on the development of MOPS.
- Status of European FLYSAFE program:
  - Effects of clean and contaminated fluid.
  - GIDS evaluation.
- Comparative risks of visual vs sensor based systems.
- Boeing does not recommend use of GIDS using current threshold of 0.5mm (0.020”).
- Transport Canada described it’s methodology for moving forward with GIDS approval.

The Future of Ground Ice Detection: Where Do We Go From Here? Panel Discussion

- FAA unable to certify GIDS primary under current regulations with any threshold.
  - However, encourage use for engine nacelle checks.
- Boeing strongly objects to 0.5mm threshold.
- Transport Canada developing a process for GIDS approval at YYZ CDF:
  - Focusing on replacing tactile check.
- Establishing working group of ALL parties to develop methodology for US approval.
- Need demand from operators for GIDS.